

REMARKS/ARGUMENTS

Information Disclosure Statement

The listing of prior art in the application was considered an improper *Information Disclosure Statement* under 37 CFR §1.98(b). The Applicant understands the Examiner and hereby respectfully submits, along with a copy of the prior art, a proper *Information Disclosure Statement*.

It is to be noted that the last reference in the currently submitted *Information Disclosure Statement*, the reference to US patent no. 5,692,698, granted to Thomas J. Forbes, was cited by the Canadian Examiner in the corresponding Canadian case.

Title

In order for the title to reflect the amendments made to the claims, the Applicant has amended the title of the invention. No new matter has been added.

Description

The Applicant has amended the description to correct minor mistakes. The Applicant has also amended the "Summary of the Invention" to reflect the changes made in the claims. No new matter was added.

Claims

Claim 1 is cancelled.

Claims 2-16 are new.

Claim Objections

Claim 1 has been objected by the Examiner because it contains a typographical error. Namely, the Applicant wrote "feed" instead of "fed". Since claim 1 is cancelled, the objection to claim 1 is now obsolete.

Claim Rejections - 35 USC § 112

The Examiner has rejected claim 1 under 35 USC § 112 as being indefinite. Claim 1 being cancelled, the rejection of claim 1 under 35 USC § 112 is now obsolete.

Claim Rejections - 35 USC § 102

The Examiner has rejected claim 1 under 35 USC § 102(b) as being anticipated by the patent granted to Charles S. Thompson (US 3,589,652) (hereinafter "Thompson"). The Examiner believes that all the limitations set forth in claim 1 were anticipated by Thompson.

The Applicant understands that the wording of claim 1 can be seen as being anticipated by the disclosure of Thompson. Therefore, the Applicant respectfully cancels claims 1 and submits new claims 2-16. The new independent claims are believed to be patentably distinct from the prior art.

New claims

The Applicant respectfully submits new claim 2-16. As mentioned above, new independent claims are believed to be patentably distinct from Thompson and also from the prior art, cited by the Examiner, but not relied upon.

Furthermore, claims 2-16 are now believed to clearly point out and distinctively claim the subject matter that the Applicant regards as his invention.

Application No. 10/712,883
Amendments dated August 24, 2005
Reply to Office action of July 7, 2005

No new matter was added.

Abstract

The Applicant has amended the abstract to reflect the changes made in the claims. No new matter was added.

Note

The Applicant has appointed the undersigned, Robert Brouillette, registration number 31,930, as his agent to prosecute the aforementioned application and to transact all business in the United States Patent and Trademark Office connected therewith. The Power of Attorney form is being filed simultaneously. The copy is enclosed herewith.

Considering the above arguments, the Applicant respectfully requests that a timely Notice of Allowance be issued in this case for all pending claims.

Respectfully submitted,

BROUILLETTE & PARTNERS

By 

Robert Brouillette
Reg. No. 31,930
1100 René-Lévesque Boulevard West
Suite 2300
Montréal, Québec, Canada H3B 4N4

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Fax: (514) 395-8554

(07887-016)

Encl: Information Disclosure Statement (PTO form PTO/SB/08A);
Clean description replacement sheets;
Clean claims replacement sheets;
Clean abstract replacement sheet;
Power of Attorney (PTO form PTO/SB/81).

Amendments to the Description:

Please replace, in the aforementioned application, old paragraphs 1, 5, 6 and 8-13 by currently amended paragraphs 1, 5, 6 and 10-15.

Please add, in the aforementioned application, new paragraphs 8, 9 and 16.

[0001] This invention relates to an improvement in an apparatus for dispensing a tape, i.e., ribbon, web, ~~or~~ string or strip material, generally referred to herein as "tape", when the tape is being unwound at a laminating machine such as a corrugating machine or press. One aspect of the present invention is to prevent the tape from falling off the edge of the tape package when unwinding. Another aspect is to prevent the tape from twisting in the dispensing equipment.

BRIEF SUMMARY OF THE INVENTION

[0005] The present invention is directed to an apparatus providing a means to prevent the tape from falling off the edges of the tape package. An idler roller is used and positioned near the unwinding tape package, where the tape, coming off the tape package when unwinding, will go around the idler roller and back around the tape package at least once and from there to the system dispensing the tape to the laminating machine. In this manner when the tape is coming off the tape package, it goes around the idler roller and tape package combination at least once before going through the rest of the dispensing system, in effect creating at least one loop of tape going around the idler roller tape package combination. This apparatus and method prevents the tape from falling off the tape package because the tape leaving the package at the nip point of the tape and tape package when unwinding is being pulled towards the ~~center~~ center of the tape package by the preceding loop of tape going around the idler roller tape package combination. Without that innovation, when the tape leaves the tape package at the moment the tape is at it's edge, the

tape actually tries to find the shortest route, which is going off the side of the tape package; a defect called a fall-off.

[0006] With this innovation, we use the fact that the tape is always somewhat slippery between each of its layers on the tape package, so that when the tape first leaves the tape package during unwinding, it is pulled away from the edge of the tape package and towards the ~~center~~center of the tape package by the preceding loop of tape around the idler roller tape package combination, as the loop of tape around the idler roller tape package combination is ahead in the winding pattern of the tape package. Alternatively, when the tape leaves the idler roller tape package combination for the last time before going to the rest of the dispensing system towards the laminating machine, this tape has already been pulled off the tape package at least once, thus is loose on the idler roller tape package combination and is then being pulled towards the center, away from the tape package edges by the geometry of the tape dispenser. As a result, the tape is always pulled towards the center (length) of the tape package either by the preceding loop around the idler roller tape package combination, or by the geometry of the dispenser when the tape finally leaves the idler roller tape package combination.

[0008] Accordingly, the apparatus of the present invention comprises a system for dispensing strip material wound transversely on a roll, drum or reel and mounted for rotation about an axis wherein said strip is lead around an idler roller, around said roll, drum or reel and again around said idler roller and then fed to other parts of a dispensing system, whereby fall off of said strip material from said roll, drum or reel is avoided.

[0009] The present invention also provides a method of dispensing a strip material wound transversely on a roll, drum or reel and mounted for rotation about a first axis comprising the following steps:

- placing an idler roller along a second axis parallel to said first axis;
- leading said strip material around said idler roller;
- leading said strip material around said roll, drum or reel;
- leading said material again around the said idler roller.

[00080010] These and other novel features of the invention will be more fully described herein below.

BRIEF DESCRIPTION OF THE DRAWINGS

[00090011] The present invention will be described with reference to the accompanying drawing wherein:

[00100012] FIG. 1 is a view of the tape package, idler roller and first pulley of tape dispenser system.

[00110013] FIG. 2 is a top view of the tape package, idler roller and first pulley of tape dispenser system.

[00120014] FIG. 3 is a side view of the tape package, idler roller and first pulley of tape dispenser system.

[00130015] The present invention provides an improved apparatus for the dispensing of a tape at the corrugating machine or press. A tape package 13 is unwound, where the tape is wound with a traverse wind ratio as can be seen by the tape paths 14, 15 and 16 around the tape package 13. The tape 10 first leaves the nip point 17 and before going to the pulley 11 of the tape dispensing system, it goes around idler roller 12 and back around the tape package 13 idler roller 12 combination at least once, before going to the pulley 11.

[0016] Having described the invention with reference to accompanying illustrations of the apparatus of the present invention, it is contemplated that engineering changes can be made without departing from the spirit or scope of the invention as set forth in the appended claims.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Clean replacement sheets for the claims are enclosed herewith.

Claims

1. (Cancelled)
2. (New) A system for dispensing strip material wound transversely on a roll, drum or reel and mounted for rotation about an axis wherein said strip is lead around an idler roller, around said roll, drum or reel and again around said idler roller and then fed to other parts of a dispensing system, whereby fall off of said strip material from said roll, drum or reel is avoided.
3. (New) A system as claimed in claim 2 wherein the said axis is horizontal.
4. (New) A system as claimed in claim 3 wherein strip material is a reinforcing or tear tape.
5. (New) A system for dispensing strip material wound transversely on a roll, drum or reel having two lateral portions and a central portion located between said lateral portions, said roll, drum or reel being further mounted for rotation about an axis, wherein said strip is lead around an idler roller, generally around said central portion of said roll, drum or reel and again around said idler roller and then fed to other parts of a dispensing system, whereby fall off of said strip material from said roll, drum or reel is avoided by moving said strip away from one of said lateral portions.
6. (New) A system as claimed in claim 5 wherein the said axis is horizontal.
7. (New) A system as claimed in claim 6 wherein strip material is a reinforcing or tear tape.

8. (New) A system for dispensing strip material having a first width and wound transversely on a roll, drum or reel having a second width larger than said first width, said roll, drum or reel further having two lateral portions and a central portion located between said lateral portions, said roll, drum or reel being further mounted for rotation about an axis, wherein said strip is lead around an idler roller, generally around said central portion of said roll, drum or reel and again around said idler roller and then fed to other parts of a dispensing system, whereby fall off of said strip material from said roll, drum or reel is avoided by moving said strip away from one of said lateral portions.
9. (New) A system as claimed in claim 8 wherein the said axis is horizontal.
10. (New) A system as claimed in claim 9 wherein strip material is a reinforcing or tear tape.
11. (New) A method of dispensing a strip material wound transversely on a roll, drum or reel and mounted for rotation about a first axis comprising the following steps:
 - a. placing an idler roller along a second axis parallel to said first axis;
 - b. leading said strip material around said idler roller;
 - c. leading said strip material around said roll, drum or reel;
 - d. leading said material again around the said idler roller.
12. (New) A method as claimed in claim 11 wherein the said axes are horizontal.
13. (New) A method as claimed in claim 12 wherein strip material is a reinforcing or tear tape.
14. (New) A method as claimed in claim 11 wherein said roll, drum or reel further comprises two lateral portions and a central portion located between said two lateral portions and wherein step c) further comprises the leading of said strip material generally around said central portion of said roll, drum or reel.

15. (New) A method as claimed in claim 14 wherein the said axes are horizontal.
16. (New) A method as claimed in claim 15 wherein strip material is a reinforcing or tear tape.

Amendments to the Abstract:

Please replace the abstract currently on file with the following amended abstract in which the changes are marked-up.

ABSTRACT

An apparatus to prevent ~~the tape~~strip material from falling off the edges of ~~the~~a roll, drum or reel
~~tape package~~when unwinding. The apparatus also includes an idler roller. When unwinding, the
strip material goes around the idler roller, then around the roll, drum or reel, generally in its
central portion and then again around the idler roller before being fed to a laminating machine. A
method to use the apparatus is also provided.

A clean replacement sheet is enclosed herewith.